

AMENDMENT TO THE CLAIMS

1.(Currently Amended) A process for obtaining samples for ~~analyzation~~— analysis from a cascade impactor comprising providing a plurality of impactor components having impaction surfaces carrying particles that have been classified, supporting the plurality of impactor components on a support, such that the impactor surfaces of the plurality of impactor components are separated and enclosed to form separate enclosures, injecting a solvent solution into each of the plurality of enclosures containing an impaction surface, ~~carrying particles~~ agitating the solvent applied on each separated and enclosed surface by moving the support so that the plurality of the separated impaction surfaces are agitated simultaneously, and removing a desired amount of liquid for a sample from each separate enclosure.

2.(Currently Amended) The method of claim 1, including transferring the samples to vials for an ~~analyzation~~—instrument used to analyze the samples.

3.(Previously Presented) The method of claim 1, including agitating the solvent in all of the separate enclosures by rocking the support for the plurality of impactor components.

4.(Previously Presented) The method of claim 1, including agitating the solvent in all of the separate enclosures by rocking the support for the plurality of impactor components.

5-8(Canceled)

9.(Previously Presented) A method of obtaining samples from a plurality of separated impaction surfaces on which classified particles have been deposited, comprising supporting a plurality

of the impaction surfaces, each in a separate enclosed chamber on a common carrier, introducing a solvent into each of the enclosed chambers, agitating the solvent in all of the enclosed chambers simultaneously to dissolve particles on the impaction surfaces, and providing separate fluid connections to each of the enclosed chambers for the impaction surfaces for the introduction of the solvent.

10.(Previously Presented) The method of claim 9, including removing a sample from each of the chambers held on the carrier.

11.(Original) The method of claim 10, and washing the plurality of chambers simultaneously while supported on a carrier.

12.(Previously Presented) The method of claim 9, wherein each of said chambers is formed by a cup having flanges around the edges thereof, the impaction surfaces being on the interior of the cup, supporting the flanges on the carrier and providing a manifold overlying the plurality of cups on the carrier, and the step of providing fluid connections comprising providing separate openings in said manifold to access each cup separately for introducing solvent and removing samples from the respective cup.

13.(Original) The method of claim 12, including sealing the periphery of each cup relative to the manifold.

14.(Original) The method of claim 12, including utilizing a syringe for introducing solvent into each of the chambers and removing samples subsequent to dissolution of particles in the solvent.

15-27 (Canceled)

28.(Previously Presented) A method of processing particles held on impactor plates in separated chambers comprising selecting one of the methods of adding solvents to each chamber consisting of manual pipetting and automatic pipetting; selecting one of the methods of dissolution of particles in the solvent comprising using one of the group consisting of gentle agitation, mechanical vibration, ultrasonic vibration, recirculation, and direct contact rubbing; acquiring a sample from each chamber after the dissolution step by one of the methods of sample acquisition consisting of a manual syringe, an automatic syringe, or decanting liquid from the cup from the dissolved sample; and thereafter disposing of waste sample solutions in each chamber and, washing and drying the impactor plates.

29.(Original) The method of claim 28, including further coating the impactor plates with an anti-bounce coating by one of methods in the group consisting of manual pipetting, and automatic pipetting, followed by drying with a gaseous fluid.

30.(Original) The method of claim 28, wherein waste disposal is accomplished by one of the group consisting of manually dumping, automatically dumping, or sucking material from a chamber containing an impactor plate.

31.(Original) The method of claim 28, wherein said washing is accomplished by one of the group consisting of manual washing, or utilizing a special wash station having passageways for introducing liquid and discharging liquid, and passageways for air drying.

32.(Previously Presented) The method of claim 28, wherein drying comprising one of the group consisting of manual drying, hot air drying, and hot nitrogen enriched air drying.

33-34 (Canceled)